

P a t e n t   C l a i m s

1.

- A device for placement between the hands of a person performing chest compressions and the chest of a patient or a manikin, characterised in comprising:  
a first part and a second part, said parts being moveable towards each other when a compression is performed,  
a return means between said parts for moving said parts away from each other again when the compression is relieved,  
a mechanical sound generator between said parts for generating a sound when said parts are moved towards each other with a force exceeding a pre-defined value,  
an electric power source between said parts,  
an electronic sound generating means between said parts, and coupled to said power source, for generating a repeating sound indicating a desired compression rate, and  
a switch between said parts, said switch being operated by the movement of said parts towards each other, and said switch operably coupling said power source to said electronic sound generating means.

2.

- Device according to claim 1, characterised in that said switch is integrated in said mechanical sound generator.

3.

- Device according to claims 1 or 2, characterised in that said switch includes a microphone or other piezoelectric means that picks up the sound energy created by said mechanical sound generator and utilizes this energy to couple said power source to said electronic sound generating means.

4.

- Device according to any of the preceding claims, characterised in that the first occurrence of the repeating sound occurs after the first occurrence of the mechanical sound.

5.

Device according to any of the preceding claims, characterised in that the repeating sound may be switched off and on by pressing the first and the second parts  
5 together with a sufficient force over a specified period of time.

6.

A device for placement between the hands of a person performing chest compressions and the chest of a patient or a manikin, characterised in comprising:  
10 a first part and a second part, said parts being moveable towards each other when a compression is performed,  
a return means between said parts for moving said parts away from each other again when the compression is relieved, and  
a mechanical sound generator between said parts for generating a sound when said parts  
15 are moved towards each other with a force exceeding a pre-defined value,  
said mechanical sound generator comprising a plate suspended at one end thereof, the opposite end of said plate being free, said plate being shaped to generate a sound when said force exceeding a predetermined value is exerted on said free end of said plate.

20 7.

Device according to any of the preceding claims, characterised in that said return means is a pliable gasket extending along the perimeter of said parts.

25 8.

A device for placement between the hands of a person performing chest compressions and the chest of a patient or a manikin, characterised in comprising:  
a first part and a second part, said parts being moveable towards each other when a compression is performed,  
30 a return means between said parts for moving said parts away from each other again when the compression is relieved,  
an electric power source between said parts,

an electronic sound generating means between said parts, and coupled to said power source, and  
a switch between said parts, said switch being operated by the movement of said parts towards each other, and said switch operably coupling said power source to said  
5 electronic sound generating means.

9.

Device according to claim 8, characterised in that the sound generator generates a repeating sound indicating a desired compression rate.

10

10.

Device according to claim 8 or 9, characterised in that said sound generating means generates a sound when said parts are moved towards each other with a force  
15 exceeding a pre-defined value.

11.

Device according to claim 8, 9 or 10, characterised in further comprising a mechanical sound generator between said parts for generating a sound when said parts  
20 are moved towards each other with a force exceeding a pre-defined value.

12.

Device according to any of the preceding claims 1, 2, 3, 4, 5, 8, 9, 10 or 11, characterised in that said power source is a power generator, generating  
25 electric power from the movement of said parts.

13.

Device according to any of the preceding claims, characterised in that the outside surfaces of said parts are made from or at least partly covered with a material  
30 with a high coefficient of friction, preferably also being pliable, to avoid slipping and hurting.

14.

A device for placement between the hands of a person performing chest compressions and the chest of a patient or a manikin, characterised in comprising:

a first part and a second part, said parts being moveable towards each other when a  
5 compression is performed,

a return means between said parts for moving said parts away from each other again when the compression is relieved,

a sound generator between said parts for generating a sound when said parts are moved towards each other with a force exceeding a pre-defined value,

10 an orientation sensitive means being responsive to the orientation of the first and second parts relative to each other, setting the device to a first pre-defined value when the first part is situated lower than the second part, and a second pre-defined value when the second part is situated lower than the first part.

15 15.

Device according to claim 14, characterised in that the orientation sensitive means is a distance element adapted to swing by influence of gravity between a first position, whereby the travel distance of the first and second parts towards each other until the sound is generated is of a first magnitude, and a second position, whereby the  
20 travel distance is of a second magnitude, the second magnitude being lesser than the first magnitude.

16.

Device according to claim 14, characterised in that the element is mounted at  
25 the end of a peg and being equipped with a weight attached or integrated to the side of the element, the weight swinging the distance element under the influence of gravity between the first and the second position.

17.

30 Device according to claim 14, characterised in that the orientation sensitive means is an electronic orientation sensitive component, like an orientation sensitive accelerometer or a level sensitive switch, e.g., a mercury switch.